# Oroville Facilities Relicensing Efforts Environmental Work Group Draft Narrative Reports for Resource Action Discussion

Resource Action: EWG-47 Task Force Recommendation Category: 2

### Create Trout Stocking Program in Suitable Oroville Wildlife Area (OWA) Ponds

Date of Field Evaluation: No field evaluation was conducted

Evaluation Team: Eric See, with Phil Unger and David Sun

### **Description of Potential Resource Action Measure:**

This measure would create a trout stocking program (put and take) in suitable Oroville Wildlife Area (OWA) ponds. The stocking program would enhance the sport fishery, which would potentially increase recreational opportunities. The potential risk of introduced fish diseases is expected to be minimal since most planted fish would not be expected to survive when ponds warm up in the summer.

#### **Related Resource Actions:**

There are several other Resource Actions that are either similar to or otherwise related to this measure:

- EWG-45, that proposes to create a trophy salmonid stocking program in Thermalito Afterbay.
- EWG-48, that proposes to create trophy angling areas in selected Oroville Wildlife Area ponds by stocking warm water species (e.g., Florida strain bass).
- EWG-50, that proposes to continue the management protocols for the cold water fishery in Lake Oroville.
- EWG-78A, that would develop maintenance and recreational management actions to avoid impact to special status species within the project area.
- EWG-87, that proposes to operate or modify the Oroville Complex in a manner that would provide suitable warm water for agricultural and recreational purposes, while providing adequate cold water releases at the Thermalito Afterbay Outlet.

## **Nexus to the Project:**

The OWA ponds were created during construction of Oroville Dam and other Oroville facilities as borrow sites for gravel. The lower Feather River is hydrologically connected to many of the OWA ponds, and many have been designed to flood at high flows to reduce downstream flooding effects. DFG currently manages the OWA primarily for wildlife habitat and recreational activities. This resource action would be designed to enhance existing sport fishery by providing additional trophy angling opportunities that would otherwise not exist. In addition, this measure would potentially reduce fishing pressure within the Project area on Central Valley steelhead and Central Valley springrun Chinook salmon, both listed as threatened species under the Federal Endangered Species Act.

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#### **Potential Environmental Benefits:**

A properly managed trout stocking program would potentially reduce angling pressure on native salmonid fish stocks within the project area and would thereby improve native salmonid fish production.

#### **Potential Constraints:**

Water temperatures in OWA ponds are a major potential constraint on establishing a trout stocking program because it is unknown how long the stocked trout would survive in the warm summer temperatures that prevail in most of the OWA ponds. If the stocked trout survive the warm temperatures, additional constraints may arise from potential escapement of stocked fish into the lower river during flooding events, which may potentially impact Central Valley steelhead and Central Valley spring-run Chinook salmon in the Feather River. The impact of fish escapement may also include the potential risk of disease introduction.

### **Existing Conditions in the Proposed Resource Action Implementation Area:**

The OWA is situated near Feather River downstream of the Oroville Reservoir. It is comprised of approximately 11,000-acres, and is primarily managed by DFG for wildlife habitat and recreational activities. The area encompasses over 75 warm water ponds and sloughs, along with large areas of emergent marsh. Warm water fish, such as bass, catfish and crappie, are abundant. The fish populations are self sustaining through natural production in the ponds and recruitment from the Feather River, which floods into the OWA ponds during high flow events.

The OWA ponds typically warm during the summer months. Most cold water fish species would not survive under this condition, and due to the fact that the most common fish diseases identified in the Feather River basin thrive in colder water, the potential risk of introducing fish diseases is anticipated to be minimal. However, if stocked fish were to survive through the summer and winter flooding created opportunities for the fish to move into the Feather River, then the potential disease introduction would be increased.

## **Design Considerations and Evaluation:**

Properly managing and screening all stocked fish for fish diseases prior to fish planting would minimize disease transmission to resident fish in the OWA ponds. This effort would need coordination between the Feather River Hatchery staff and OWA staff; however, all fish being stocked under the current stocking programs are already being screen for fish diseases.

There is a need for more information on the ecological impacts of the trout stocking program on existing threatened and endangered species, such as red legged frog.

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One potential design consideration to minimize escapement of stocked fish into the lower Feather River would be to avoid stocking fish during periods when there is a significant risk of Feather River spilling into the OWA ponds.

## Synergisms and Conflicts:

This Resource Action is compatible with other measures that relate to stocking programs and recreation enhancements, and therefore should be managed in coordination with those other programs.

#### **Uncertainties:**

A major uncertainty is the potential impacts of a trout stocking program on resident fish and threatened and endangered species in the OWA ponds and the Feather River.

#### **Cost Estimate:**

The target species and stocking goal need to be established before costs can be estimated. Once they have been determined, the cost for this measure could be estimated from existing hatchery stocking programs and could ultimately be integrated into the existing programs.

### **Recommendations:**

This resource action would require proper management to avoid any impact to the existing fishery. All stocked fish would need to be screened for fish diseases to prevent disease transmission to fishes in the OWA ponds and potentially into the Feather River.

In addition, this measure should be coordinated with other potential sport fishery enhancements.